



# HELLER

## BROTHERS COMPANY

# SWISS PATTERN FILES

LIST OF FEBRUARY 1, 1930

REVISED JANUARY 1, 1951

**HAND FILES** . . . are tapered in thickness on the ends, but are parallel in width. Two flat sides are double cut and the files have one safe (uncut) edge. The other edge has teeth.



Made in sizes:

Approximate size of finished files:

Made in cuts: Nos. 00, 0, 1, 2, 3, 4 and 6.

3"  $\frac{7}{16}$ " x  $\frac{3}{32}$ " 4"  $\frac{17}{32}$ " x  $\frac{1}{8}$ " 6"  $\frac{3}{4}$ " x  $\frac{5}{32}$ " 8"  $\frac{29}{32}$ " x  $\frac{3}{16}$ " 10"  $\frac{13}{32}$ " x  $\frac{7}{32}$ " 12"  $\frac{41}{16}$ " x  $\frac{17}{64}$ "

**PILLAR FILES** . . . are similar in shape to Hand Files, but are narrower. The two flat sides are double cut and both edges are left safe (uncut).



Made in sizes:

Approximate size of finished files:

Made in cuts: Nos. 00, 0, 1, 2, 3, 4 and 6.

3"  $\frac{19}{64}$ " x  $\frac{3}{32}$ " 4"  $\frac{23}{64}$ " x  $\frac{7}{64}$ " 6"  $\frac{31}{64}$ " x  $\frac{5}{32}$ " 8"  $\frac{39}{64}$ " x  $\frac{7}{32}$ " 10"  $\frac{47}{64}$ " x  $\frac{15}{64}$ " 12"  $\frac{53}{64}$ " x  $\frac{17}{64}$ "

**NARROW PILLAR FILES** . . . are the same shape as Pillar Files, but are narrower for the same length. The two flat sides are double cut, the edges are left safe (uncut).



Made in sizes:

Approximate size of finished files:

Made in cuts: Nos. 00, 0, 1, 2, 3, 4 and 6.

3"  $\frac{7}{32}$ " x  $\frac{5}{64}$ " 4"  $\frac{17}{64}$ " x  $\frac{7}{64}$ " 6"  $\frac{23}{64}$ " x  $\frac{5}{32}$ " 8"  $\frac{15}{32}$ " x  $\frac{3}{16}$ " 10"  $\frac{9}{16}$ " x  $\frac{1}{4}$ " 12"  $\frac{41}{64}$ " x  $\frac{5}{16}$ "

**EXTRA NARROW PILLAR FILES** . . . are similar to Pillar and Narrow Pillar Files, but narrower in length. The two flat sides are double cut, the edges are left safe (uncut).



Made in sizes:

Approximate size of finished files:

Made in cuts: Nos. 00, 0, 1, 2, 3, 4 and 6.

3"  $\frac{9}{64}$ " x  $\frac{3}{32}$ " 4"  $\frac{3}{16}$ " x  $\frac{7}{64}$ " 6"  $\frac{1}{4}$ " x  $\frac{5}{32}$ " 8"  $\frac{5}{16}$ " x  $\frac{3}{16}$ " 10"  $\frac{3}{8}$ " x  $\frac{7}{32}$ " 12"  $\frac{7}{16}$ " x  $\frac{1}{4}$ "

**HALF ROUND FILES** . . . taper in width and thickness to a point. The flat and half round sides of the file are double cut.



Made in sizes:

Approximate size of finished files:

Made in sizes:

Approximate size of finished files:

Made in cuts: Nos. 00, 0, 1, 2, 3, 4 and 6.

3"  $\frac{19}{64}$ " x  $\frac{3}{32}$ " 4"  $\frac{3}{8}$ " x  $\frac{7}{64}$ " 5"  $\frac{29}{64}$ " x  $\frac{7}{64}$ " 6"  $\frac{33}{64}$ " x  $\frac{9}{64}$ " 8"  $\frac{45}{64}$ " x  $\frac{11}{64}$ " 10"  $\frac{15}{16}$ " x  $\frac{17}{64}$ " 12"  $\frac{17}{64}$ " x  $\frac{19}{64}$ "

**KNIFE FILES** . . . are shaped somewhat similar to knife blades. They are tapered in width and thickness to a point. These files are double cut on flat sides and are single cut on edges.



Made in sizes:

Approximate size of finished files:

Made in cuts: Nos. 00, 0, 1, 2, 3 and 4.

3"  $\frac{3}{8}$ " x  $\frac{5}{64}$ " 4"  $\frac{15}{32}$ " x  $\frac{7}{64}$ " 5"  $\frac{9}{16}$ " x  $\frac{9}{64}$ " 6"  $\frac{11}{16}$ " x  $\frac{5}{32}$ " 8"  $\frac{7}{8}$ " x  $\frac{3}{16}$ "

**WARDING FILES** . . . are tapered in width to a point. They are double cut on flat sides and are also cut on edges.



Made in sizes:

Approximate size of finished files:

Made in cuts: Nos. 00, 0, 1, 2 and 4.

3"  $\frac{3}{8}$ " x  $\frac{3}{64}$ " 4"  $\frac{7}{16}$ " x  $\frac{3}{64}$ " 6"  $\frac{19}{32}$ " x  $\frac{5}{64}$ " 8"  $\frac{3}{4}$ " x  $\frac{3}{32}$ " 10"  $\frac{15}{16}$ " x  $\frac{7}{64}$ "

**BARRETTE FILES** . . . are cut on the wide flat side only. The back and beveled edges are left safe (uncut).



Made in sizes:

Approximate size of finished files:

Made in cuts: Nos. 00, 0, 1, 2 and 4.

3"  $\frac{11}{32}$ " 4"  $\frac{1}{2}$ " 6"  $\frac{21}{32}$ " 8"  $\frac{7}{8}$ "



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**THREE SQUARE FILES** . . . are triangular in shape at angles of 60 degrees. They are double cut on all sides and the edges are single cut.



Made in sizes: 3" 4" 5" 6" 8" 10"  
 Approximate size of finished files:  $\frac{5}{32}$ "  $\frac{1}{4}$ "  $\frac{5}{16}$ "  $\frac{3}{8}$ "  $\frac{1}{2}$ "  $\frac{3}{4}$ "  
 Made in cuts: Nos. 00, 0, 1, 2, 3 and 4.

**ROUND FILES** . . . are tapered from shoulder to a point and are double cut.



Made in sizes: 3" 4" 5" 6" 8" 10" 12"  
 Approximate size of finished files:  $\frac{5}{64}$ "  $\frac{1}{8}$ "  $\frac{5}{32}$ "  $\frac{3}{16}$ "  $\frac{1}{4}$ "  $\frac{21}{64}$ "  $\frac{27}{64}$ "  
 Made in cuts: Nos. 00, 0, 1, 2, 3, 4 and 6.

**ROUND STRAIGHT FILES** . . . are made similar to Round Files, but are parallel throughout the length and are double cut.



Made in sizes: 4" 5" 6" 8"  
 Approximate size of finished files:  $\frac{1}{8}$ "  $\frac{5}{32}$ "  $\frac{3}{16}$ "  $\frac{1}{4}$ "  
 Made in cuts: Nos. 00, 2 and 4.

**SQUARE FILES** . . . are square in shape and are tapered to a point. They are double cut and have one safe side.



Made in sizes: 3" 4" 6" 8" 10" 12"  
 Approximate size of finished files:  $\frac{3}{64}$ "  $\frac{1}{8}$ "  $\frac{3}{16}$ "  $\frac{1}{4}$ "  $\frac{11}{32}$ "  $\frac{7}{16}$ "  
 Made in cuts: Nos. 00, 0, 1, 2, 3 and 4.

**CROSSING FILES** . . . are oval shape but the radius of one side is greater than the radius of the other side. They taper to a point in both width and thickness and are double cut.



Made in sizes: 3" 4" 6" 8" 10"  
 Approximate size of finished files:  $\frac{5}{16}$ " x  $\frac{3}{32}$ "  $\frac{7}{16}$ " x  $\frac{7}{64}$ "  $\frac{5}{8}$ " x  $\frac{3}{16}$ "  $\frac{13}{16}$ " x  $\frac{15}{64}$ "  $\frac{61}{64}$ " x  $\frac{3}{16}$ "  
 Made in cuts: Nos. 00, 0, 1, 2, 3, 4 and 6.

**EQUALING FILES** . . . are parallel in width and thickness. They are double cut on flat sides and both edges are cut.



Made in sizes: 3" 4" 6" 8"  
 Approximate size of finished files:  $\frac{5}{16}$ " x  $\frac{1}{16}$ "  $\frac{13}{32}$ " x  $\frac{5}{64}$ "  $\frac{19}{32}$ " x  $\frac{7}{64}$ "  $\frac{3}{4}$ " x  $\frac{9}{64}$ "  
 Made in cuts: Nos. 00, 0, 1, 2 and 4.

**METAL SAW FILES** . . . are made from the same size of steel as Three Square Files, but are parallel the entire length. The three sides are double cut and the edges are single cut.



Made in sizes: 3" 4" 5" 6" 8"  
 Approximate size of finished files:  $\frac{5}{32}$ "  $\frac{1}{4}$ "  $\frac{5}{16}$ "  $\frac{3}{8}$ "  $\frac{1}{2}$ "  
 Made in cuts: Nos. 0, 2 and 4.

**CROCHET FILES** . . . are flat in shape with two rounded edges. They are double cut on flat sides and edges and tapered both in width and thickness.



Made in sizes: 3" 4" 6" 8" 10"  
 Approximate size of finished files:  $\frac{1}{4}$ " x  $\frac{5}{64}$ "  $\frac{3}{8}$ " x  $\frac{3}{32}$ "  $\frac{1}{2}$ " x  $\frac{1}{8}$ "  $\frac{5}{8}$ " x  $\frac{5}{32}$ "  $\frac{3}{4}$ " x  $\frac{3}{16}$ "  
 Made in cuts: Nos. 00, 0, 1, 2 and 4.

**SLITTING FILES** . . . are made from steel whose cross section resembles that of a diamond, having 18 degrees between the sides. They are double cut on four sides and single cut on the two sharp edges.



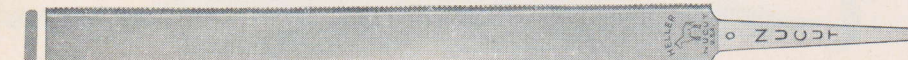
Made in sizes: 4" 6"  
 Approximate size of finished files:  $\frac{7}{16}$ "  $\frac{19}{32}$ "  
 Made in cuts: Nos. 00, 0 and 2.

**PIPPIN FILES** . . . are made from a special section having a rounded back and tapering to a sharp edge. They are tapered in width and thickness to the point of the files. These files are double cut.



Made in sizes: 4" 6" 8"  
 Approximate size of finished files:  $\frac{3}{32}$ " x  $\frac{1}{8}$ "  $\frac{3}{8}$ " x  $\frac{5}{32}$ "  $\frac{1}{2}$ " x  $\frac{3}{16}$ "  
 Made in cuts: Nos. 00, 0, 1 and 2.

**ROUND EDGE and SQUARE EDGE JOINT FILES** . . . are flat in shape and parallel in width and thickness. They are double cut on both edges only.



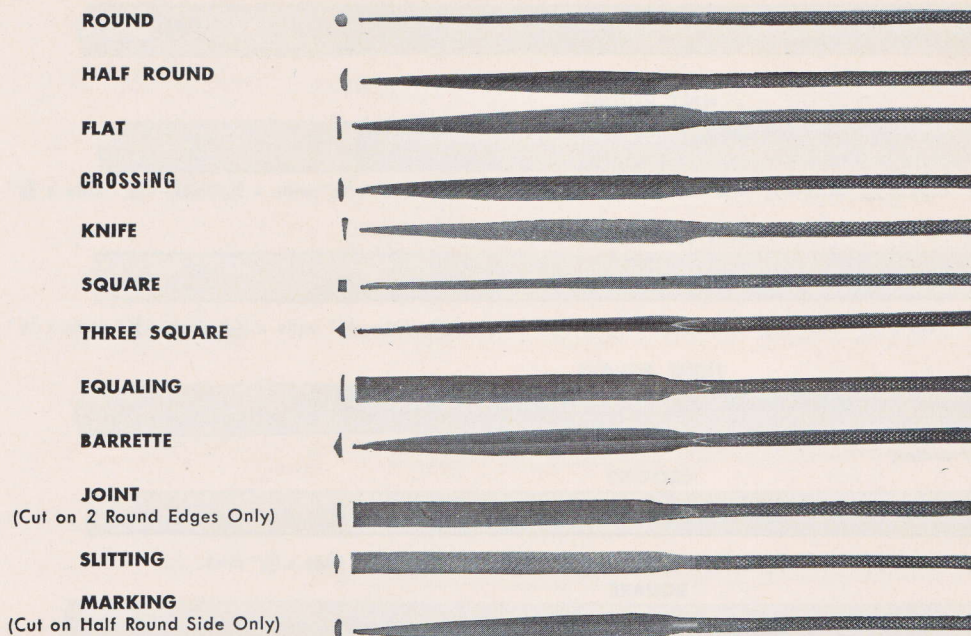
Both Round Edge and Square Edge Joint Files are made in sizes:  
 Approximate size of finished files—thick type:  $\frac{13}{32}$ " x  $\frac{5}{64}$ "  $\frac{19}{32}$ " x  $\frac{7}{64}$ "  
 Approximate size of finished files—thin type:  $\frac{13}{32}$ " x  $\frac{3}{64}$ "  $\frac{19}{32}$ " x  $\frac{5}{64}$ "  
 Both Round Edge and Square Edge Joint Files are made in cuts: Nos. 0 and 2.



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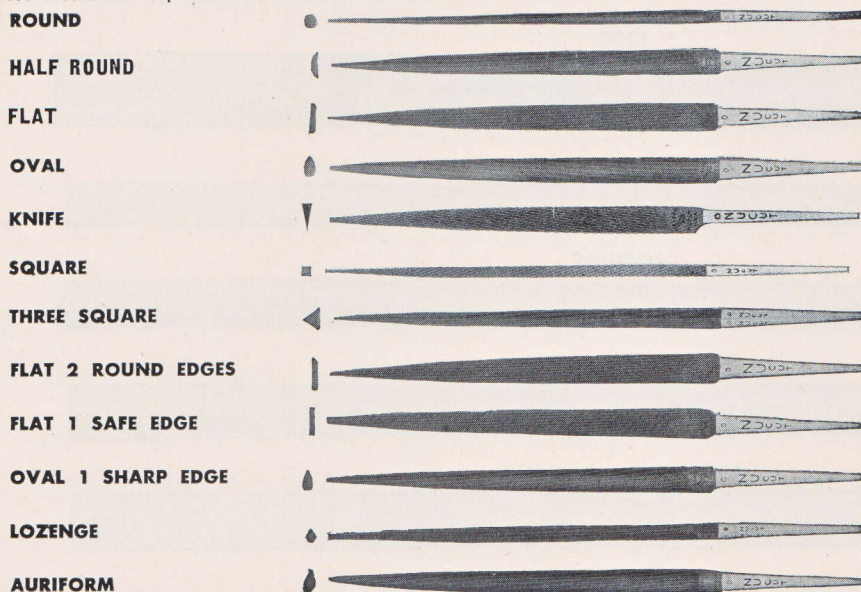
### ROUND HANDLE NEEDLE FILES

These files are generally used by die makers, tool makers, watch makers and other users who require specially fine tools. They are made with knurled handles and in 12 shapes as illustrated below. They can be obtained in sizes 4", 5½" and 6¼" and in cuts Nos. 0, 2, 4 and 6. They are packed in special boxes for the convenience of the user. These files are also packed in an assortment of 12 shapes. In 4" length, Oval is furnished instead of Crossing.



### DIE SINKER FILES

These files are generally used by die sinkers when working on dies. They are made in twelve shapes in the 3½" size only in cuts Nos. 0, 1 and 2. These files are also packed in an assortment of 12 shapes.



**PILLAR TESTING FILES** . . . are similar in shape to Pillar Files.



Made in sizes:

Approximate size of finished files:

Made in cuts: Nos. 0 and 1.

6"  
3¼" x 5/32"

8"  
3¾" x 7/32"

**CORRUGATING SHEAR FILES** . . . are used when it is desired to produce corrugations on metal shears, knives and other tools. They are double cut on 6" hand blanks which produces a cutting or shearing edge, and are made in 6" size only, in cuts Nos. 0, 2 and 4.





# HELLER PARALLEL MACHINE FILES

**8" OVERALL LENGTH**

MADE IN CUTS Nos. 00, 0 and 2

For use in Oliver, Harvey-Butterfly, Cochrane-Bly and similar machines

**ROUND**



MADE IN  $\frac{1}{8}$ ",  $\frac{3}{16}$ ",  $\frac{1}{4}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ " and  $\frac{5}{8}$ " diameter.

**HALF ROUND**



MADE IN  $\frac{3}{16}$ " wide x  $\frac{3}{32}$ " thick— $\frac{1}{4}$ " wide x  $\frac{1}{8}$ " thick— $\frac{3}{8}$ " wide x  $\frac{3}{16}$ " thick— $\frac{1}{2}$ " wide x  $\frac{1}{4}$ " thick— $\frac{5}{8}$ " wide x  $\frac{5}{16}$ " thick— $\frac{3}{4}$ " wide x  $\frac{3}{8}$ " thick.

**PILLAR (one safe edge)**



MADE IN  $\frac{3}{16}$ " wide x  $\frac{3}{32}$ " thick— $\frac{1}{4}$ " wide x  $\frac{1}{8}$ " thick— $\frac{3}{8}$ " wide x  $\frac{3}{16}$ " thick— $\frac{1}{2}$ " wide x  $\frac{1}{4}$ " thick— $\frac{5}{8}$ " wide x  $\frac{5}{16}$ " thick— $\frac{3}{4}$ " wide x  $\frac{3}{8}$ " thick.

**THREE SQUARE**



MADE IN  $\frac{3}{16}$ ",  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ " and  $\frac{5}{8}$ " widths.

**CROCHET**



MADE IN  $\frac{3}{16}$ " wide x  $\frac{3}{32}$ " thick— $\frac{1}{4}$ " wide x  $\frac{1}{8}$ " thick— $\frac{3}{8}$ " wide x  $\frac{3}{16}$ " thick— $\frac{1}{2}$ " wide x  $\frac{3}{16}$ " thick— $\frac{5}{8}$ " wide x  $\frac{7}{32}$ " thick.

**SQUARE**



MADE IN  $\frac{3}{16}$ ",  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ " and  $\frac{5}{8}$ " widths.

**OVAL**



MADE IN  $\frac{1}{32}$ " wide x  $\frac{3}{16}$ " thick.

**KNIFE**



MADE IN  $\frac{13}{32}$ " wide x  $\frac{1}{8}$ " thick.

**PIPPIN**



MADE IN  $\frac{13}{64}$ " wide x  $\frac{5}{32}$ " thick.

**LOZENGE**



MADE IN  $\frac{11}{32}$ " wide x  $\frac{7}{32}$ " thick.

**CANT**



MADE IN  $\frac{11}{32}$ " wide x  $\frac{5}{32}$ " thick.

**EQUALING or WARDING**



MADE IN  $\frac{3}{8}$ " wide x  $\frac{5}{64}$ " thick.

**SMALL FILE ASSORTMENT**

Cuts Nos. 00, 0 and 2

This assortment consists of 12 files of which the Oval, Pippin, Knife, Lozenge, Cant and Equaling are made in the one width illustrated above and the Half Round, Round, Square, Three Square, Pillar, and Crochet in widths of  $\frac{3}{16}$ ". (Specify cut.)

**LARGE FILE ASSORTMENT**

Cuts Nos. 00, 0 and 2

This assortment consists of 12 files of which the Oval, Pippin, Knife, Lozenge, Cant and Equaling are made in the one width illustrated above and the Half Round, Round, Square, Three Square, Pillar, and Crochet in widths of  $\frac{3}{8}$ ". (Specify cut.)

*"Good Tools Since 1836"*

## HELLER BROTHERS COMPANY

A NEW JERSEY CORPORATION

NEWCOMERSTOWN, OHIO